

# ESG DATA API DOCUMENTATION

MSCI ESG Application Programming Interface (API) Documentation.  
Additional documentation can be found at:

<https://developer.msci.com>

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## OVERVIEW AND CONVENTIONS

MSCI ESG APIs are RESTful Web APIs that enable direct access to MSCI ESG Data over the internet, enabling the seamless integration of ESG Data into client and third-party platforms.

Additional documentation is available on the MSCI API Portal located here: <https://developer.msci.com>

### ESG DATA API

The ESG Data API offers access to MSCI ESG data including ratings and raw data. All client facing data is expected to be available via the Data API.

### HTTP METHOD

Unless stated otherwise, all Web Services are using HTTP 'GET' method.

### API VERSIONING

ESG APIs uses version numbers. If change is necessary to be made to an API that will break the current version, then the version number will be changed.

### METERING AND THROTTLING

To prevent misuse due to either malicious intent or programmatic errors and ensure continuous availability of API Services to all our Clients, MSCI implements Throttling (also referred to as Rate Limiting Features). Rate Limits are typically defined in terms of number of API requests made per minute and per day for an API Key. These limits may be subject to commercial Terms & Conditions.

HTTP Response 429 - Too Many Requests is sent back by the API Server (Gateway) whenever a client breaches a predefined rate limit. This response is also including a Retry-After header, specifying the number of seconds after which the request can be retried.

### BACKWARD COMPATIBILITY

When changes are needed to an API, MSCI will strive to make them backward compatible.

### AUTHENTICATION

The following section describes machine to machine authentication.

To use MSCI Web Services, the user needs:

- An API key

- An API secret

API key and secret are obtained once and are reusable. To obtain an API key and secret, the client needs to call MSCI's client service.

For any API call, key and secret are passed in the header of the http request. The header requires the Authorization field for authentication:

Authorization: Basic <base-64(APIKey:APISecret)>

For example, if the API key is DFXGGXDFDXFGGXDFANMIHSU and the API secret zdfg849dfg4g8xdfgsd418sdr, the base 64 encoding of

DFXGGXDFDXFGGXDFANMIHSU:zdfg849dfg4g8xdfgsd418sdr is

REZYR0dYREZEWEZHR1hERkFOTU1IU1U6emRmZzg0OWRmZzRnOHhkZmdzZDQxOHNkcg==,

and the header has the field:

Authorization: Basic

REZYR0dYREZEWEZHR1hERkFOTU1IU1U6emRmZzg0OWRmZzRnOHhkZmdzZDQxOHNkcg==

If the API key and secret are valid, the request is handled; if not a 401 error is returned.

The API key and API secret aims to allow MSCI to authenticate the caller and to identify which Indexes the calling system has access to. This way MSCI only returns the corresponding permissioned index data.

### Example of header usage

#### JAVA

```
String authString = API_KEY + ":" + API_SECRET;
byte[] authEncBytes = Base64.getEncoder().encode(authString.getBytes());
String authStringEnc = new String(authEncBytes);

HttpClient client = HttpClients.custom().build();
HttpRequest request = RequestBuilder.get()
    .setUri("https://api.msci.com/esg/report/v1.0/reports/esgRatingsReport/
IID000000002143620")
    .setHeader(HttpHeaders.AUTHORIZATION, "Basic " + authStringEnc)
    .build();
HttpResponse response = client.execute(request);
```

#### Curl

```
curl -H "Authorization: Basic
DFXGGXDFDXFGGXDFANMIHSU:zdfg849dfg4g8xdfgsd418sdr" -X GET
"https://api.msci.com/esg/report/v1.0/reports/esgRatingsReport/ IID000000002143620"
```

### Python

```
from base64 import b64encode

import requests

b64login = b64encode(bytes('%s:%s' % ('DFXGGXDFDXFGGXDFANMIHSU',
'zdfg849dfg4g8xdfgsd418sdr')).encode('utf-8'))
requests.get("https://api.msci.com/esg/report/v1.0/reports/esgRatingsReport/
IID000000002143620", headers={
    "Authorization": "Basic %s" % b64login })
```

## ESG DATA API

The base URL of the ESG Data API is <https://api.msci.com/esg/data/v1.0>.

### DESCRIPTION

The ESG Data API provides a way for a client to retrieve current day ESG data for all issuers and data points that the user is entitled to receive. Data entitlements match what is available in MSCI ESG Manager.

### AUTHENTICATION DETAILS

Use basic authentication header with: API Key/Secret, MSCI username prefixed with MSCI\, Email/password or Internal technical account (sys\_\*)

### ENDPOINTS LIST

Endpoint	Description
/funds (GET)	Retrieve a list of funds and related fund Ratings data
/funds (POST)	Retrieve a list of funds and related fund Ratings data based on the posted input specification
/issuers [GET]	Retrieve a list of issuers and related issuer data
/issuers [POST]	Retrieve a list of issuers and related issuer data based on the posted input specification
/issuers/history [GET]	Retrieve issuer ESG Data History for a set of identifiers (Beta Phase)
/issuers/history [POST]	Retrieve issuer ESG Data History for a set of identifiers (Beta Phase)
/metadata/factors	Retrieve a list of factors permitted to the account, optionally limited to either issuer or fund factors
/parameterValues/countries	Return a list of available countries
/parameterValues/coverages	Return a list of available issuer coverage universes

/parameterValues/esgIndustries	Return a list of available ESG Ratings Industries
/parameterValues/factorCategoryPaths	Retrieve a list of Category Paths used to organize factors
/parameterValues/factorProductNames	Retrieve a list of product names used to identify groupings of factors
/parameterValues/fundAssetClasses	Return a list of available fund asset class names
/parameterValues/fundAssetUniverses	Return a list of fund asset universe names
/parameterValues/fundDomiciles	Return a list of fund domicile names
/parameterValues/fundLipperGlobalClasses	Return a list of Lipper global class names
/parameterValues/gicsSubIndustries	Retrieve a list of available GICS Sub-Industries
/parameterValues/indexes	Retrieve a list of available indexes

## ENDPOINTS DETAIL

### /FUNDS/

#### **HTTP Method:**

GET

#### **ENDPOINT DESCRIPTION**

This endpoint is used to retrieve a set of funds, containing factor data for each fund, based on the parameters given in the request. The results are governed by the data points and fund coverage permissioned to the account. This request allows the caller to specify which data they want to retrieve, and from which 'universe' of funds the results should come from. For example, a request could ask for all Fund Metrics:Summary category data for funds in the "Equity" fund asset class. The result would be a JSON object with a list of funds along with the requested data. The query would look like this: [https://api.msci.com/esg/data/v1.0/funds?category\\_path\\_list=Fund Metrics:Summary&fund\\_asset\\_class\\_list=Equity](https://api.msci.com/esg/data/v1.0/funds?category_path_list=Fund Metrics:Summary&fund_asset_class_list=Equity)

#### **REQUEST**

##### **Service URLs:**



<https://api.msci.com/esg/data/v1.0/funds>

### Query parameters

Name	Type	Mandatory	Default value	Accepted values	Description
format	string		json	json, csv, xml	The result of the issuers endpoint will be returned in JSON format by default. However, the result can also be returned as a CSV file, which can then be imported directly into application such as Excel. The CSV format consists of a header row identifying each column, followed by one or more rows of data. XML can also be specified, and the result will be a properly formatted XML document without a DTD or schema.
offset	Integer (must be greater than zero)				The Data API has the potential to generate large amounts of data. If a query will result in extra large amounts of data, the user will be required to specify paging parameters. The offset value indicates which record to start retrieving values. This option is usually paired with the limit parameter to create a window of results to return. When paging is using, an additional section of the JSON response will contain information about the total number of records that could be returned, along with links for the next,prev,first,last pages where appropriate. If you are on the last page, no <b>next</b> link will be generated, for example.
limit	Integer (must be greater than one)				The Data API has the potential to generate large amounts of data. If a query will result in extra large amounts of data, the user will be required to specify paging parameters. The limit value indicates the maximum number of records to return. This option is usually paired with the offset parameter to create a window of results to return. When paging is using, an additional section of the JSON response will contain information about the total number of records that could be returned, along with links for the next,prev,first,last pages where appropriate. If you are on the last page, no <b>next</b> link will be generated, for example.
product_name_list	array				This parameter is a list of one or more product names which contain groups of data factors. Data factors are grouped by category as well as by product name. A product name is used to identify a product to which a data factor must belong in order to be returned. The list of products available to the caller can be found via the /parameterValues/factorProductNames endpoint.
[array item]	string				Data factors are grouped by category as well as by product name. A product name is used to

Name	Type	Mandatory	Default value	Accepted values	Description
					<p>identify a product to which a data factor must belong in order to be returned. The list of products available to the caller can be found via the <code>/parameterValues/factorProductNames</code> endpoint.</p> <p>This parameter is a list of one or more category path strings.</p> <p>A category path is used to identify a collection of data factors. All category paths available to the caller can be obtained from the <code>/parameterValues/factorCategoryPaths</code> endpoint.</p>
category_path_list	array				
[array item]	string				<p>A category path is used to identify a collection of data factors. All category paths available to the caller can be obtained from the <code>/parameterValues/factorCategoryPaths</code> endpoint.</p>
factor_name_list	array				<p>This is a list of factor names. A factor name is used to identify a unique data point value associated with an issuer. A full list of available factors for the caller can be found by using the <code>/metadata/factors</code> endpoint.</p>
[array item]	string				<p>A factor name is used to identify a unique data point value associated with an issuer. A full list of available factors for the caller can be found by using the <code>/metadata/factors</code> endpoint.</p>
name_contains	string				<p>The name matches string is used to locate issuers whose primary issuer name value contains the given string anywhere in the name. If parent/child options are used, additional issuers may be returned that are related to the primary issuer but will not necessarily match the pattern given.</p>
starts_with	string				<p>Limit the primary issuer to a name that starts with the specified value. If parent/child options are specified, there may be issuers included that don't start with the specified name.</p>
fund_lipper_global_class_list	array				<p>This parameter contains a list of one or more fund lipper global class names. The available names can be determined by first issuing a request to the <code>/parameterValues/fundLipperGlobalClasses</code> endpoint. Names from that list may be used in this query to limit results to funds located in the specified Lipper global classes.</p>
[array item]	string				

Name	Type	Mandatory	Default value	Accepted values	Description
fund_domicile_list	array				This parameter contains a list of one or more fund domicile names. The available domicile names can be determined by first issuing a request to the <b>/parameterValues/fundDomicileNames</b> endpoint. Names from that list may be used in this query to limit results to funds located in the specified domiciles
[array item]	string				A Country Code is the 2-character code representing a country.
fund_asset_universe_list	array				This parameter contains a list of one or more fund asset universe names. The available fund asset universe names can be determined by first issuing a request to the <b>/parameterValues/fundAssetUniverses</b> endpoint. Names from that list may be used in this query to limit results to funds located in the specified fund asset universes.
[array item]	string				A GICS SubIndustry code is a string value which is used to identify a particular GICS SubIndustry. A full list of GICS SubIndustries is available from the <b>/parameterValues/gicsSubIndustries</b> endpoint.
fund_asset_class_list	array				This parameter contains a list of one or more fund asset class names. The available fund asset class names can be determined by first issuing a request to the <b>/parameterValues/fundAssetClasses</b> endpoint. Names from that list may be used in this query to limit results to funds located in the specified fund asset classes.
[array item]	string				The ESG Industry ID is a string value that identifies an ESG Industry. A full list of available ESG Industries can be retrieved from the <b>/parameterValues/esgIndustries</b> endpoint
fund_identifier_type	string				When requesting data, the client can specify a list of one or more issuer identifiers for which data will be returned. The default issuer identifier is an MSCI issuer id. However, by specifying a different lookup factor, the client can specify IDs such as ISINs. All identifiers must be of the same type, however. For example, mixing ISINs and MSCI Issuer Ids is not allowed.
fund_identifier_list	array				This parameter is used to limit the results to a specific set of issuers. The caller can list one or more issuer identifiers which identified the issuers for which data should be returned.

Name	Type	Mandatory	Default value	Accepted values	Description
[array item]	string				<p>The issuer identifier is a value that is used to locate an issuer within the universe of issuers available to the client. By default, this identifier is an MSCI Issuer ID value, but this can also be a different identifier type when the issuer_identifier_type is specified. All identifiers must be of the same type.</p> <p>The issuer id is an identifier used to locate an issuer within the universe of issuers available to the client. By default, this id is an MSCI Issuer ID value, but this can also be a different identifier type when the lookup_factor is specified. All ids must be of the same type.</p>

## RESPONSE

### Possible Outputs

Status	Description
200	Success
206	Partial Content may have been returned
400	Malformed request
401	Unauthorized
403	No subscription available for this data
500	Unexpected Server Error
503	Service Unavailable

### Output Encoding

application/json, text/csv

### Output Description

The fund endpoint returns a collection of data for the fund and datapoints requested. By default, the result is returned in JSON format. The results can also be returned as a CSV file if the request uses the format parameter, or if the accept header specifies text/csv as an acceptable result.

### Sample Output

```
{
  "status": "OK",
  "code": 200,
  "trace_id": "9d19a15ff2e4832a",
  "timestamp": "2019-03-15T21:22:11Z",
  "messages": [],
  "result": {
    "funds": [
      {
        "FUND_NAME": "Parnassus Fund;Investor",
        "FUND_SHARE_CLASS_ID": "40001494",
        "FUND_ID": "35529804",
        "FUND_ISIN": "US7017651099",
        "FUND_TICKER": "PARNX",
        "FUND_ESG_QUALITY_SCORE_PCTL_GLOBAL": 41.547134356404634,
        "FUND_IN_UNIVERSE": true
      },
      {
        "FUND_NAME": "Fidelity Advisor Capital Development Fund;O",
        "FUND_SHARE_CLASS_ID": "40001683",
        "FUND_ID": "35530080",
        "FUND_ISIN": "US3161272089",
        "FUND_TICKER": "FDETX",
        "FUND_ESG_QUALITY_SCORE_PCTL_GLOBAL": 37.2439711869715,
        "FUND_IN_UNIVERSE": true
      },
      {
        "FUND_NAME": "JPMorgan US Equity Fund;I",
        "FUND_SHARE_CLASS_ID": "40001538",
        "FUND_ID": "36450272",
        "FUND_ISIN": "US4812A11594",
        "FUND_TICKER": "JUESX",
        "FUND_ESG_QUALITY_SCORE_PCTL_GLOBAL": 48.62198559348575,
        "FUND_IN_UNIVERSE": true
      }
    ]
  }
}
```

## CODE SAMPLES

### cURL

```
curl -i -H "Accept: application/json"
-X GET
https://api.msci.com/esg/data/v1.0/funds?category_path_list=ESG+Rating
s:Company+Summary&format=json
```

### Python

```
import requests url =
"https://api.msci.com/esg/data/v1.0/funds?category_path_list=ESG+Ratin
gs:Company+Summary&format=json"; headers = { "Accept":
"application/json" } response = requests.request("POST", url,
headers=headers) print(response.text)
```

### Java

The following example uses Unirest for Java, a lightweight HTTP request library.

```
HttpResponse response =
Unirest.get("https://api.msci.com/esg/data/v1.0/funds?category_path_li
st=ESG+Ratings:Company+Summary&format=json") .header("Accept",
"application/json") .asString();
```

### C#

```
var client = new
RestClient("https://api.msci.com/esg/data/v1.0/funds?category_path_list=ESG+Ratings:Company+Summary&format=json"); var request = new
RestRequest(Method.GET); request.AddHeader("Accept",
"application/json"); IRestResponse response = client.Execute(request);
```

### HTTP Method:

POST

### ENDPOINT DESCRIPTION

In addition to requesting fund data via a GET request, users can also create a POST request where the POSTed data consists of the various query parameters that are available on the GET request. The POST form of this endpoint allows for potentially large amounts of data to be specified. For example, a client may have a list of issuers IDs that they wish to retrieve data for. Specifying the ids in a GET request may exceed the maximum length allowed for a GET request. A POST request has no such limit. It is important to note that any POST request specify the Content-Type being used for submission. For example, if JSON is being used to send data, the Content-Type should be application/json, otherwise the request may be rejected with a 400 status code and an 'Invalid formatting' error message.

### REQUEST

#### Service URLs:

<https://api.msci.com/esg/data/v1.0/funds>

#### Body payload

Name	Type	Mandatory	Default value	Accepted values	Description
fund_identifier_list	array				
[array item]	string				
fund_identifier_type	string		ISIN	ASSET_OVERVIEW_ID, ISIN, SHARE_CLASS_ID, TICKER	The fund identifier type is a string defining the factor name used for to identify funds speciiied in the fund_idenfiter_list parameter. Available options vary by user, but include one ore more of the following ASSET_OVERVIEW_ID, ISIN, SHARE_CLASS_ID, TICKER
fund_asset_class_list	array				
[array item]	string				
fund_asset_universe_list	array				
[array item]	string				

Name	Type	Mandatory	Default value	Accepted values	Description
fund_domicile_list	array				
[array item]	string				
fund_lipper_global_class_list	array				
[array item]	string				
fund_metrics_universe_only	boolean		TRUE		The fund_metrics_universe_only flag restricts the funds that are retrieved to only those that are in the MSCI Fund Ratings Universe
starts_with	string				Locate issuers whose name starts with the given value and return requested data related to those issuers. If parent/child is specified, the related issuers will not necessarily have names that start with the given string. The value is only used to identify the primary issuers that are the result of the query.
name_contains	string				If a name_contains value is specified, only issuers that have the specified string will be included in the results.
factor_name_list	array				
[array item]	string				
category_path_list	array				
[array item]	string				
product_name_list	array				
[array item]	string				
limit	integer			Must be greater than 1	The limit parameter is used to define the maximum number of results that will be returned in the request. This parameter is option; however some data requests will result in a large number of issuers being returned. When this is detected by the API, an error will be returned indicating that a limit must be specified.
offset	integer			Must be greater than 0	The offset value is paired with a limit parameter to define a window of results. When a limit is specified without an offset, the offset is treated as 0. This means that the results will contain the first record, up to the limit of items requested. To get the

Name	Type	Mandatory	Default value	Accepted values	Description
format	string	json		json, csv, xml	<p>next 'page', a new offset must be specified.</p> <p>When paging is in effect, and JSON is being returned, the results will include predefined links which can be used to get the next, previous, first, and last pages based on the limit and offset values given in the request.</p> <p>The result of the issuers endpoint will be returned in JSON format by default. However, the result can also be returned as a CSV file, which can then be imported directly into application such as Excel. The CSV format consists of a header row identifying each column, followed by one or more rows of data. XML can also be specified and the result will be a properly formatted XML document without a DTD or schema.</p>

## RESPONSE

### Possible Outputs

Status	Description
200	OK
206	Partial Content may have been returned
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not found
500	Internal Server Error

### Output Encoding

application/xml, application/json, text/csv

### Output Description

The fund endpoint returns a collection of data for the fund and datapoints requested. By default, the result is returned in JSON format. The results can also be returned as a CSV



file if the request uses the format parameter, or if the accept header specifies text/csv as an acceptable result.

### Sample Output

```
{
  "status": "OK",
  "code": 200,
  "trace_id": "9d19a15ff2e4832a",
  "timestamp": "2019-03-15T21:22:11Z",
  "messages": [],
  "result": {
    "funds": [
      {
        "FUND_NAME": "Parnassus Fund;Investor",
        "FUND_SHARE_CLASS_ID": "40001494",
        "FUND_ID": "35529804",
        "FUND_ISIN": "US7017651099",
        "FUND_TICKER": "PARNX",
        "FUND_ESG_QUALITY_SCORE_PCTL_GLOBAL": 41.547134356404634,
        "FUND_IN_UNIVERSE": true
      },
      {
        "FUND_NAME": "Fidelity Advisor Capital Development Fund;O",
        "FUND_SHARE_CLASS_ID": "40001683",
        "FUND_ID": "35530080",
        "FUND_ISIN": "US3161272089",
        "FUND_TICKER": "FDETX",
        "FUND_ESG_QUALITY_SCORE_PCTL_GLOBAL": 37.2439711869715,
        "FUND_IN_UNIVERSE": true
      },
      {
        "FUND_NAME": "JPMorgan US Equity Fund;I",
        "FUND_SHARE_CLASS_ID": "40001538",
        "FUND_ID": "36450272",
        "FUND_ISIN": "US4812A11594",
        "FUND_TICKER": "JUESX",
        "FUND_ESG_QUALITY_SCORE_PCTL_GLOBAL": 48.62198559348575,
        "FUND_IN_UNIVERSE": true
      }
    ]
  }
}
```

## CODE SAMPLES

### cURL

```
curl -i -H "Accept: application/xml" -d "{}" -X POST
https://api.msci.com/esg/data/v1.0/funds
```

### Python

```
import requests import json url =
"https://api.msci.com/esg/data/v1.0/funds"; payload = json.dumps( {} )
headers = { "Accept": "application/xml" } response =
requests.request("POST", url, data=payload, headers=headers)
print(response.text)
```

### Java

The following example uses Unirest for Java, a lightweight HTTP request library.

```

HttpResponse response =
Unirest.post("https://api.msci.com/esg/data/v1.0/funds")
.header("Accept", "application/xml") .body("{}") .asString();

C#
var client = new RestClient("https://api.msci.com/esg/data/v1.0/funds"); var request
= new RestRequest(Method.POST); request.AddHeader("Accept", "application/xml");
request.AddParameter("application/json", "{}", ParameterType.RequestBody); IRestResponse response
= client.Execute(request);

```

## /ISSUERS/

### HTTP Method:

GET

### ENDPOINT DESCRIPTION

This endpoint is used to retrieve factor data based on the parameters given in the request. The results are governed by the data points and issuer/ fund coverage permissioned to the account. This request allows the caller to specify which data they want to retrieve, and from which 'universe' of companies. For example, a request could ask for all ESG Ratings category data for issuers in the "Banks" ESG Rating Industry (15698). The result would be a JSON object with a list of issuers along with the requested data. The query would look like this:

[https://api.msci.com/esg/data/v1.0/issuers?category\\_path\\_list=ESG Ratings:Company Summary&esg\\_industry\\_id\\_list=15698&coverage=esg\\_ratings](https://api.msci.com/esg/data/v1.0/issuers?category_path_list=ESG Ratings:Company Summary&esg_industry_id_list=15698&coverage=esg_ratings)

The inclusion of the coverage ensures that only issuers who have ESG related information are returned in the result.

### REQUEST

#### Service URLs:

<https://api.msci.com/esg/data/v1.0/issuers>

#### Query parameters

Name	Type	Mandatory	Default value	Accepted values	Description
format	string		json	json, csv, xml	The result of the issuers endpoint will be returned in JSON format by default. However, the result can also be returned as a CSV file, which can then be imported directly into application such as Excel. The CSV format consists of a header row identifying each column, followed by one or more rows of data. XML can also be specified and the result will be a properly formatted XML document without a DTD or schema.

Name	Type	Mandatory	Default value	Accepted values	Description
offset	integer			Must be greater than zero	The Data API has the potential to generate large amounts of data. If a query will result in extra large amounts of data, the user will be required to specify paging parameters. The offset value indicates which record to start retrieving values. This option is usually paired with the limit parameter to create a window of results to return. When paging is using, an additional section of the JSON response will contain information about the total number of records that could be returned, along with links for the next,prev,first,last pages where appropriate. If you are on the last page, no next link will be generated, for example.
limit	integer			Must be greater than 1	The Data API has the potential to generate large amounts of data. If a query will result in extra large amounts of data, the user will be required to specify paging parameters. The limit value indicates the maximum number of records to return. This option is usually paired with the offset parameter to create a window of results to return. When paging is using, an additional section of the JSON response will contain information about the total number of records that could be returned, along with links for the next,prev,first,last pages where appropriate. If you are on the last page, no next link will be generated, for example.
reference_column_list	array			issuerid, issuername, level	If a parent/child option is specified, other than do_not_apply, the client can also specify one or more 'reference' columns to appear along with any inherited values. These values help to identify the source of the inheritance. The issuerid column will contain the MSCI issuer id of the issuer from which the value is derived. Similarly, the issuername column will contain the name of the issuer. Finally, the level is a numeric value indicating how many levels away from the issuer the value was inherited from.
[array item]	string			issuerid, issuer_id, issuername, issuer_name, level	

Name	Type	Mandatory	Default value	Accepted values	Description
					<p>This option is used to control how data is inherited from parent entities, and or whether to include subsidiaries of an issuer. A client must have purchased the Subsidiary Mapping feature for this option to have any effect.</p>
parent_child	string		do_not_apply	do_not_apply, inherit_missing_values, include_subsidiaries, full_parent_child	<p>The 'inherit_missing_values' will include data values from parent issuers if the issuer does not have a value of it's own.</p> <p>The 'include_subsidiaries' will include subsidiaries of an issuer.</p> <p>The 'full_parent_child' option will both inherit missing data values from the parent as well as include subsidiaries of an issuer.</p> <p>The default is 'do_not_apply'.</p>
product_name_list	array				<p>This parameter is a list of one or more product names which contain groups of data factors. Data factors are grouped by category as well as by product name. A product name is used to identify a product to which a data factor must belong in order to be returned. The list of products available to the caller can be found via the /parameterValues/factorProductNames endpoint</p>
[array item]	string				<p>Data factors are grouped by category as well as by product name. A product name is used to identify a product to which a data factor must belong in order to be returned. The list of products available to the caller can be found via the /parameterValues/factorProductNames endpoint.</p>
category_path_list	array				<p>This parameter is a list of one or more category path strings. A category path is used to identify a collection of data factors. All category paths available to the caller can be obtained from the</p>

Name	Type	Mandatory	Default value	Accepted values	Description
					/parameterValues/factorCategoryPaths endpoint.
[array item]	string				A category path is used to identify a collection of data factors. All category paths available to the caller can be obtained from the /parameterValues/factorCategoryPaths endpoint.
factor_name_list	array				This is a list of factor names. A factor name is used to identify a unique data point value associated with an issuer. A full list of available factors for the caller can be found by using the /metadata/factors endpoint.
[array item]	string				A factor name is used to identify a unique data point value associated with an issuer. A full list of available factors for the caller can be found by using the /metadata/factors endpoint.
coverage	string				A coverage is an identifier used to limit the list of issuers in the result to those that belong to the specified coverage universe. For example, the esg_ratings coverage would only include issuers that have an ESG Rating.
name_contains	string				The name_matches string is used to locate issuers whose primary issuer name value contains the given string anywhere in the name. If parent/child options are used, additional issuers may be returned that are related to the primary issuer, but will not necessarily match the pattern given.
starts_with	string				Limit the primary issuer to a name that starts with the specified value. If parent/child options are specified, there may be issuers included that don't start with the specified name.
gics_subindustry_id_list	array				This parameter is a list of one or more gics subindustry codes. The issuers returned will be limited to those belonging to the specified GICS Sub Industries.
					A GICS SubIndustry code is a string value which is used to identify a particular GICS SubIndustry. A full list of GICS SubIndustries is available from the

Name	Type	Mandatory	Default value	Accepted values	Description
[array item]	string				<p>/parameterValues/gicsSubIndustries endpoint.</p> <p>A GICS SubIndustry code is a string value which is used to identify a particular GICS SubIndustry. A full list of GICS SubIndustries is available from the /parameterValues/gicsSubIndustries endpoint.</p> <p>This parameter is a list of one or more ESG Industry codes. The issuers returned will be limited to those belonging to the specified ESG Industries.</p>
esg_industry_id_list	array				<p>The ESG Industry ID is a string value that identifies an ESG Industry. A full list of available ESG Industries can be retrieved from the /parameterValues/esgIndustries endpoint</p> <p>The ESG Industry ID is a string value that identifies an ESG Industry. A full list of available ESG Industries can be retrieved from the /parameterValues/esgIndustries endpoint</p>
[array item]	string				<p>This parameter contains a list of one or more country codes which is associated with the issuer. A Country Code is the 2 character code representing a country.</p> <p>A Country Code is the 2 character code representing a country.</p>
country_code_list	array				<p>A collection of index identifiers compatible with MSCI ESG Manager. An index identifier is a string value which identifies an index to use for a query. Indexes are used to limit the results of a request to a specific set of issuers that belong to the specified index. A full list of indexes that are available to the caller can be retrieved at /parameterValues/indexes</p>
index_identifier_list	array				<p>The index id is a string value which identifies an index to use for a query. Indexes are used to limit the results of a request to a specific set of issuers that belong to the specified index. A full list of indexes that are available to</p>
[array item]	string				

Name	Type	Mandatory	Default value	Accepted values	Description
					the caller can be retrieved at /parameterValues/indexes
index_identifier_type	string				When requesting data, the client can specify a list of one or more issuer identifiers for which data will be returned. The default issuer identifier is an MSCI issuer id. However, by specifying a different lookup factor, the client can specify IDs such as ISINs. All identifiers must be of the same type, however. For example, mixing ISINs and MSCI Issuer Ids is not allowed.
issuer_identifier_list	array				This parameter is used to limit the results to a specific set of issuers. The caller can list one or more issuer identifiers which identified the issuers for which data should be returned.
[array item]	string				The issuer identifier is a value that is used to locate an issuer within the universe of issuers available to the client. By default, this identifier is an MSCI Issuer ID value, but this can also be a different identifier type when the issuer_identifier_type is specified. All identifiers must be of the same type.
					The issuer id is an identifier used to locate an issuer within the universe of issuers available to the client. By default, this id is an MSCI Issuer ID value, but this can also be a different identifier type when the lookup_factor is specified. All ids must be of the same type.

## RESPONSE

### Possible Outputs

Status	Description
200	Success
206	Partial Content may have been returned
400	Malformed request

Status	Description
401	Unauthorized
403	No subscription available for this data
500	Unexpected Server Error
503	Service Unavailable

### Output Encoding

application/xml, application/json, text/csv

### Output Description

The issuers endpoint returns a collection of data for the issuers and datapoints requested. By default, the result is returned in JSON format. The results can also be returned as a CSV file if the request uses the format parameter, or if the accept header specifies text/csv as an acceptable result.

### Response Body Returned

Possible outputs for status: 20

### Sample Output

```
{
  "status": "OK",
  "code": 200,
  "trace_id": "9fc435f08e70b687",
  "timestamp": "2018-11-26T13:48:26Z",
  "messages": [],
  "result": {
    "issuers": [
      {
        "ISSUER_NAME": "CSX Corporation",
        "ISSUERID": "IID000000002123685",
        "ISSUER_TICKER": "CSX",
        "ISSUER_CUSIP": 126408103,
        "ISSUER_SEDOL": 2160753,
        "ISSUER_ISIN": "US1264081035",
        "ISSUER_CNTRY_DOMICILE": "US",
        "IVA_COMPANY_RATING": "A",
        "IVA_RATING_ANALYSIS": "CSX has been upgraded to 'A'
from 'BBB'. Recent enhancements in our methodology have seen an
improvement in CSX's corporate governance assessment, particularly
in its board and pay themes\n\nCSX has a split CEO/chairman role and
management oversight is further strengthened by a majority
independent board and fully independent audit committee. The company
has several programs to mitigate safety risks, but witnessed two
employee fatalities in 2017 (2016: 0) and increased frequency of
employee injuries. Despite investing USD 2 billion by end-2017, CSX
looks unlikely to meet a 2018 deadline for the US-mandated Positive
Train Control system. Large-scale layoffs continue with 6,200 jobs
expected to be cut from 2018-2020 (26% of the workforce). While CSX
employees have competitive benefits and 83% are represented by
```



```

unions, negative morale and productivity impacts might be
unavoidable.",
    "IVA_RATING_DATE": 20180405,
    "IVA_INDUSTRY": "Road & Rail Transport",
    "IVA_PREVIOUS_RATING": "BBB",
    "IVA_RATING_TREND": 1,
    "ENVIRONMENTAL_PILLAR_QUARTILE": 3,
    "ENVIRONMENTAL_PILLAR_SCORE": 4.9,
    "ENVIRONMENTAL_PILLAR_WEIGHT": 22,
    "INDUSTRY_ADJUSTED_SCORE": 6.4,
    "GICS_SUB_IND": "Railroads",
    "GOVERNANCE_PILLAR_SCORE": 7.8,
    "GOVERNANCE_PILLAR_SCORE_2014": 10,
    "GOVERNANCE_PILLAR_QUARTILE": 1,
    "GOVERNANCE_PILLAR_WEIGHT": 22,
    "ESG_OVERALL_QUARTILE": 2,
    "SOCIAL_PILLAR_SCORE": 3.9,
    "SOCIAL_PILLAR_QUARTILE": 3,
    "SOCIAL_PILLAR_WEIGHT": 56,
    "TOTAL_NUMBER_CONTROVERSIES": 33,
    "WEIGHTED_AVERAGE_SCORE": 5
  }
}
}

```

## CODE SAMPLES

### cURL

```

curl -i -H "Accept: application/json"
-X GET
https://api.msci.com/esg/data/v1.0/issuers?category_path_list=ESG+Rati
ngs:Company+Summary&coverage=esg_ratings&format=json&index_identifier_
list=UNX000000012913701

```

### Python

```

import requests url =
"https://api.msci.com/esg/data/v1.0/issuers?category_path_list=ESG+Rati
ngs:Company+Summary&coverage=esg_ratings&format=json&index_identifier_
list=UNX000000012913701"; headers = { "Accept": "application/json" }
response = requests.request("POST", url, headers=headers)
print(response.text)

```

### Java

The following example uses Unirest for Java, a lightweight HTTP request library.

```

HttpResponse response =
Unirest.get("https://api.msci.com/esg/data/v1.0/issuers?category_path_
list=ESG+Ratings:Company+Summary&coverage=esg_ratings&format=json&inde
x_identifier_list=UNX000000012913701") .header("Accept",
"application/json") .asString();

```

### C#

```

var client = new
RestClient("https://api.msci.com/esg/data/v1.0/issuers?category_path_1
ist=ESG+Ratings:Company+Summary&coverage=esg_ratings&format=json&index_
identifier_list=UNX000000012913701"); var request = new
RestRequest(Method.GET); request.AddHeader("Accept",
"application/json"); IRestResponse response = client.Execute(request);

```

## HTTP Method:

POST

## ENDPOINT DESCRIPTION

In addition to requesting issuer data via a GET request, users can also create a POST request where the POSTed data consists of the various query parameters that are available on the GET request. The POST form of this endpoint allows for potentially large amounts of data to be specified. For example, a client may have a list of issuers IDs that they wish to retrieve data for. Specifying the ids in a GET request may exceed the maximum length allowed for a GET request. A POST request has no such limit.

It is important to note that any POST request specify the Content-Type being used for submission. For example, if JSON is being used to send data, the Content-Type should be application/json, otherwise the request may be rejected with a 400 status code and an 'Invalid formatting' error message.

## REQUEST

### Service URLs:

<https://api.msci.com/esg/data/v1.0/issuers>

### Body payload

Name	Type	Mandatory	Default value	Accepted values	Description
issuer_identifier_list	array				The issuer identifier type is a string defining the factor name used for issuers in the issuer_identifier_list parameter. Available options vary by user, but include ISSUER_ID, ISIN, CIK, CUSIP, LEI, SEDOL
[array item]	string				
issuer_identifier_type	string				
index_identifier_list	array				
[array item]	string				
country_code_list	array				
[array item]	string				
esg_industry_id_list	array				
[array item]	string				
gics_subindustry_id_list	array				
[array item]	string				

Name	Type	Mandatory	Default value	Accepted values	Description
starts_with	string				Locate issuers whose name starts with the given value and return requested data related to those issuers. If parent/child is specified, the related issuers will not necessarily have names that start with the given string. The value is only used to identify the primary issuers that are the result of the query.
name_contains	string				If a name_contains value is specified, only issuers that have the specified string will be included in the results.
coverage	string				A coverage is used to restrict the results to issuers which have certain properties relating to data coverage. For example, the AGR coverage would restrict issuers to those which have an AGR rating. The list of coverages that are available for a user is found at the <a href="#">/parameterValues/coverages</a> endpoint.
factor_name_list	array				
[array item]	string				
category_path_list	array				
[array item]	string				
product_name_list	array				
[array item]	string				
parent_child	string			do_not_apply, inherit_missing_values, include_subsidiaries, full_parent_child	The parent_child option is used to control whether other issuers or values are to be inherited or displayed based on the subsidiary structure of an issuer. The availability of this feature is based on client permissions. The default action is do_not_apply.
reference_column_list	array				
[array item]	string			issuerid, issuer_id, issuername, issuer_name, level	The specific reference column to include for each inherited data factor
limit	integer			Must be greater than 1	The limit parameter is used to define the maximum number of results that will be returned in the request. This parameter is option, however some data requests will result in a large number of issuers being returned. When this is detected

Name	Type	Mandatory	Default value	Accepted values	Description
offset	integer			Must be greater than zero	<p>by the API, an error will be returned indicating that a limit must be specified.</p> <p>The offset value is paired with a limit parameter to define a window of results. When a limit is specified without an offset, the offset is treated as 0. This means that the results will contain the first record, up to the limit of items requested. To get the next 'page', a new offset must be specified.</p> <p>When paging is in effect, and JSON is being returned, the results will include predefined links which can be used to get the next, previous, first, and last pages based on the limit and offset values given in the request.</p>
format	string		JSON	JSON, CSV, XML	<p>An optional format parameter can be specified to control the format of the output. Allowable values are: JSON CSV XML</p>

## RESPONSE

### Possible Outputs

Status	Description
200	OK
206	Partial content may have been returned
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not found
500	Internal Server Error

### Output Encoding

application/xml, application/json, text/csv

### Output Description

The issuers endpoint returns a collection of data for the issuers and datapoints requested. By default, the result is returned in JSON format. The results can also be returned as a CSV file if the request uses the format parameter, or if the accept header specifies text/csv as an acceptable result.

### Response Body Returned

Possible outputs for status: 20

### Sample Output

```
{
  "status": "OK",
  "code": 200,
  "trace_id": "9fc435f08e70b687",
  "timestamp": "2018-11-26T13:48:26Z",
  "messages": [],
  "result": {
    "issuers": [
      {
        "ISSUER_NAME": "CSX Corporation",
        "ISSUERID": "IID000000002123685",
        "ISSUER_TICKER": "CSX",
        "ISSUER_CUSIP": 126408103,
        "ISSUER_SEDOL": 2160753,
        "ISSUER_ISIN": "US1264081035",
        "ISSUER_CNTRY_DOMICILE": "US",
        "IVA_COMPANY_RATING": "A",
        "IVA_RATING_ANALYSIS": "CSX has been upgraded to 'A'
from 'BBB'. Recent enhancements in our methodology have seen an
improvement in CSX's corporate governance assessment, particularly
in its board and pay themes\n\nCSX has a split CEO/chairman role and
management oversight is further strengthened by a majority
independent board and fully independent audit committee. The company
has several programs to mitigate safety risks, but witnessed two
employee fatalities in 2017 (2016: 0) and increased frequency of
employee injuries. Despite investing USD 2 billion by end-2017, CSX
looks unlikely to meet a 2018 deadline for the US-mandated Positive
Train Control system. Large-scale layoffs continue with 6,200 jobs
expected to be cut from 2018-2020 (26% of the workforce). While CSX
employees have competitive benefits and 83% are represented by
unions, negative morale and productivity impacts might be
unavoidable.",
        "IVA_RATING_DATE": 20180405,
        "IVA_INDUSTRY": "Road & Rail Transport",
        "IVA_PREVIOUS_RATING": "BBB",
        "IVA_RATING_TREND": 1,
        "ENVIRONMENTAL_PILLAR_QUARTILE": 3,
        "ENVIRONMENTAL_PILLAR_SCORE": 4.9,
        "ENVIRONMENTAL_PILLAR_WEIGHT": 22,
        "INDUSTRY_ADJUSTED_SCORE": 6.4,
        "GICS_SUB_IND": "Railroads",
        "GOVERNANCE_PILLAR_SCORE": 7.8,
        "GOVERNANCE_PILLAR_SCORE_2014": 10,
        "GOVERNANCE_PILLAR_QUARTILE": 1,
        "GOVERNANCE_PILLAR_WEIGHT": 22,
        "ESG_OVERALL_QUARTILE": 2,
        "SOCIAL_PILLAR_SCORE": 3.9,
        "SOCIAL_PILLAR_QUARTILE": 3,
        "SOCIAL_PILLAR_WEIGHT": 56,
        "TOTAL_NUMBER_CONTROVERSIES": 33,
        "WEIGHTED_AVERAGE_SCORE": 5
      }
    ]
  }
}
```

```
    ]
  }
}
```

## CODE SAMPLES

### cURL

```
curl -i -H "Accept: application/json" -X GET
https://api.msci.com/esg/data/v1.0/issuers?category_path_list=ESG+Rati
ngs:Company+Summary&coverage=esg_ratings&format=json&index_identifier_
list=UNX000000012913701
```

### Python

```
import requests url =
"https://api.msci.com/esg/data/v1.0/issuers?category_path_list=ESG+Rati
ngs:Company+Summary&coverage=esg_ratings&format=json&index_identifier_
list=UNX000000012913701"; headers = { "Accept": "application/json" }
response = requests.request("POST", url, headers=headers)
print(response.text)
```

### Java

The following example uses Unirest for Java, a lightweight HTTP request library.

```
HttpResponse response =
Unirest.get("https://api.msci.com/esg/data/v1.0/issuers?category_path_
list=ESG+Ratings:Company+Summary&coverage=esg_ratings&format=json&inde
x_identifier_list=UNX000000012913701") .header("Accept",
"application/json") .asString();
```

### C#

```
var client = new
RestClient("https://api.msci.com/esg/data/v1.0/issuers?category_path_1
ist=ESG+Ratings:Company+Summary&coverage=esg_ratings&format=json&index_
identifier_list=UNX000000012913701"); var request = new
RestRequest(Method.GET); request.AddHeader("Accept",
"application/json"); IRestResponse response = client.Execute(request);
```

## /ISSUERS/HISTORY (BETA PHASE)

- RETRIEVE ADDITIONAL DATA BATCHES

The `/issuers/history` endpoint provides a mechanism to retrieve ESG data history for a given set of issuer identifiers. A user of the API can send in a list of issuer identifiers, a range of dates, and a collection of data factors to retrieve, and the API will return the values for each of the requested factors for the given time range. There are several options available to control how much data is returned.

The endpoint will support requests using both GET and POST. The POST method should be the method used by most API applications since it can support a larger request size

(identifiers, factor names, etc.). The GET method would typically be used for quick experimental queries.

When making a POST request, a proper Content-Type must be specified. Since the API utilizes JSON for POST requests, the Content-Type should be application/json. If the Content-Type header is not properly specified, the request may be rejected with a 400 status code and an 'Invalid formatting' error message.

Depending on the amount of data being returned, multiple requests may be required. An initial request will return the first batch of data, along with information about whether more batches are available. If more batches are available, the user should choose one of the additional data batch request services documented below.

When requesting ESG history data, it is possible to create a request which returns a large amount of data. When a request is made for history data, the API will determine the size of the total result. Based on the calculated size, the API will determine the total number of batches necessary to return all of the requested data. Every response returned from the history API endpoint contains a response\_metadata property. A typical response will look something like this:

```
"response_metadata": {
  "total_number_of_instruments": 10,
  "total_number_of_batches": 3,
  "current_batch": 1,
  "data_request_id": "bb005730-262c-4d1c-88bb-acc916ee0ed7"
}
```

In this example, a request was made for history data. The response is indicating that there will be 10 instruments in the response, broken into 3 batches. The current\_batch property indicates that this is the first batch in the result.

To retrieve additional batches, additional calls are made to /issuers/history, passing the following parameters instead of all the parameters sent in the first request:

Property Name	Description
data_request_id	This is an identifier that is assigned to a data request. It acts as a key to retrieve additional batches of information. The key remains valid for as long as data is being requested, but will expire at some point and cannot be used for caching purposes. While calling get endpoint use encoding as the request_id has special characters (code sample below), Note: The POST method should be the method used by most API applications
batch_id	This is a number used to identify which batch of data to retrieve.

Note that this method of retrieving data does not involve “paging” through the data. Once an initial request is made, the client can make multiple parallel calls to retrieve different batches of data. Also, each request which utilizes the `data_request_id` will be idempotent.

The `data_request_id` is a unique identifier which can be re-used for some period of time to refer to the same request. After the first request, the client will know how many batches exist, and if desired can generate parallel requests to get subsequent batches of data. Each batch will contain a complete set of data for a requested identifier. There are no order dependencies in the response. After some set period of time, currently set to 24 hours after the first request, the `data_request_id` will expire and requests for batches using the given id will no longer return a response.

Below code sample for encoding in Java/Python

Java:

```
import java.net.URLEncoder;
```

```
url =
```

```
"https://api.msci.com/esg/data/v1.0/issuers/history?batch_id=2&data_request_id=  
␣" + URLEncoder.encode(data_request_id, StandardCharsets.UTF_8.toString());
```

Python:

```
from urllib.parse import urlencode
```

```
urlencode(dict(data_request_id=data_request_id,batch_id=batch_id))
```

- RETRIEVE ESG DATA HISTORY FOR REQUESTED IDENTIFIERS

The `/issuers/history` endpoint provides a mechanism to retrieve ESG data history for a given set of issuer identifiers. A user of the API can send in a list of issuer identifiers, a range of dates, and a collection of data factors to retrieve, and the API will return the values for each of the requested factors for the given time range. There are several options available to control how much data is returned.

The endpoint will support requests using both GET and POST. The POST method should be the method used by most API applications since it can support a larger request size (identifiers, factor names, etc.). The GET method would typically be used for quick experimental queries.



The API accepts two types of input parameters to the request, one form of input initiates a new retrieval request, the other is used to return subsequent batches of data. The /issuers/history endpoint uses a dynamic batching scheme to return data if the results are too large to return in one request (see the section on data batching for more details on how large results are returned)

The basic request for data will include the following information:

- A list of one or more identifiers. These identifiers will be used to locate companies (issuers) who have ESG Data. The identifiers can represent Bonds, Securities, or the issuers themselves.
- A list of data factors. The factors can be the names of the factors themselves, or the request can contain category paths or product names which are used to map to data factors. Factor information is available through other API endpoints such as /metadata/factors, /parameterValues/factorCategoryPaths, and /parameterValues/factorProductNames
- A date range. The API supports date ranges of 1 date to many dates. All dates are in the format yyyy-mm-dd, i.e. 2020-04-01 would be April 1, 2020
- Other parameters to fine tune the request

#### HTTP Method:

GET

#### REQUEST

#### Service URLs:

<https://api.msci.com/esg/data/v1.0/issuers/history>

#### Query parameters

Name	Type	Description
issuer_identifier_list	array	A list of one or more issuer/instrument identifiers which resolve to issuers. Identifiers can be MSCI Issuer IDs, ISINs, CUSIPs, MDS UIDS, etc
[array item]	string	
category_path_list	array	A list of factor category paths as defined in the ESG Factor Metadata. The factor category path determines a set of data factors to retrieve. This works the same as the current day endpoint. Category paths, product names, and factor names can be mixed together, but at

Name	Type	Description
		least one factor name, category path, or product name must be specified for a request to be valid.
[array item]	string	
product_name_list	array	A list of factor product names as defined in the ESG Factor Metadata. The factor product name determines a set of data factors to retrieve. This has the same functionality as the current day endpoint. Product names, category paths, and factor names can be mixed together, but at least one factor name, category path, or product name must be specified for a request to be valid.
[array item]	string	
factor_name_list	array	A list of ESG Factor names as defined in the ESG Factor Metadata. Factor names, product names, and category paths can be mixed together, but at least one factor name, category path, or product name must be specified for a request to be valid.
[array item]	string	
start_date	date	<p>The first date to be used for data retrieval. If only a start_date is given, only data for the specified date will be returned.</p> <p>The format of the date is yyyy-mm-dd. For example, 2020-04-01 would be April 1, 2020.</p>
end_date	date	<p>The end date for the range of values to be returned. If not specified, the request will return a single value corresponding to the given start_date. The end_date cannot exceed the as_at_date. If the end_date is after the as_at_date, the request will be rejected with a 400 status code.</p> <p>The format of the date is yyyy-mm-dd. For example, 2020-04-01 would be April 1, 2020.</p>
as_at_date	date	A date which defines which corrections should be returned. If the as_at_date is before the

Name	Type	Description						
		<p>end_date, the as_at_date will override the end_date. No values will be returned beyond the specified as_at_date. If no as_at_date is specified, the data will be viewed from the perspective of the date that the request was made.</p> <p>The 'as at' date functions like a time machine. It allows the client to go back in time to view data from a particular point in time in the past. The values that are returned will be the values that would have been seen if a request had been made on the specified 'as at' date.</p> <p>The format of the date is yyyy-mm-dd. For example, 2020-04-01 would be April 1, 2020.</p> <p>The API treats historical data as a continuous stream of values for the date range specified in the call. The user can choose how often they would like to sample the stream of data. Perhaps the client only cares about what the value is at the end of each month, for example. The following options are available for the Data Sample Frequency parameter:</p> <table><tr><th>Data Sample Name</th><th>Description</th></tr><tr><td>Daily</td><td>A data value sample will be taken from each date in the specified range. If there are 200 days in the given range, there will be 200 samples taken from the stream of values, one for each day in the range. The daily range is currently only available when using the matrix_by_factor layout.</td></tr><tr><td>business_month_end</td><td>A data value sample will be taken from each business month end date in the specified range. If there are 12 months in the given range, there will be 12 samples taken from the stream of values, one for each business month end day in the range</td></tr></table> <p>The API offers different data layouts to suit the different ways that a client may want to process the data that they receive. The Data Layout options provide a way for the client to tailor the output to their needs</p>	Data Sample Name	Description	Daily	A data value sample will be taken from each date in the specified range. If there are 200 days in the given range, there will be 200 samples taken from the stream of values, one for each day in the range. The daily range is currently only available when using the matrix_by_factor layout.	business_month_end	A data value sample will be taken from each business month end date in the specified range. If there are 12 months in the given range, there will be 12 samples taken from the stream of values, one for each business month end day in the range
Data Sample Name	Description							
Daily	A data value sample will be taken from each date in the specified range. If there are 200 days in the given range, there will be 200 samples taken from the stream of values, one for each day in the range. The daily range is currently only available when using the matrix_by_factor layout.							
business_month_end	A data value sample will be taken from each business month end date in the specified range. If there are 12 months in the given range, there will be 12 samples taken from the stream of values, one for each business month end day in the range							
data_sample_frequency	string							
data_layout	string	<table><tr><th>Data Layout Name</th><th>Description</th></tr><tr><td>by_factor</td><td>The data results will be grouped by factor, and within each factor the values will be display in reverse chronological order</td></tr></table>	Data Layout Name	Description	by_factor	The data results will be grouped by factor, and within each factor the values will be display in reverse chronological order		
Data Layout Name	Description							
by_factor	The data results will be grouped by factor, and within each factor the values will be display in reverse chronological order							

Name	Type	Description
		<div>matrix_by_factor</div> <div>This layout is more compressed than the standard by_factor layout and is designed to support usage by quants who will want data rows with no gaps. The exact layout of the data content is still being finalized, but it will represent the data as a 2-d matrix.. This layout is compatible with both daily and business_month_end sample frequencies.</div>
		<div>change_ranges</div> <div>This layout will only show change ranges for each value returned. Ranges will start at the first date in the requested range and end on the last date. If a value for a factor was value for 3 months in the range, and then changed and was valid for the remaining months, there would be two value ranges in the result for that particular value.</div>
If this value is not specified, the <b>by_factor</b> layout will be used.		
inherit_missing_values	boolean	<p>A Boolean value used to indicate whether the API should inherit missing values from a parent issuer. This option is not available to clients who do not have the inheritance feature associated with their account.</p> <p>This option will automatically be set to true if the caller is permitted to receive inherited data.</p>

## RESPONSE

### Possible Outputs

Status	Description
200	Success
206	Partial Content may have been returned
400	Malformed request
401	Unauthorized
403	No subscription available for this data
500	Unexpected Server Error
503	Service Unavailable

### Output Encoding

application/xml, application/json, text/csv

### Sample Output

```
{
  "status": "OK",
  "code": 200,
  "trace_id": "158760f24d9cd939",
  "timestamp": "2019-12-02T14:22:41Z",
  "messages": [],
  "result": {
    "response_metadata": {
      "total_number_of_instruments": 1,
      "total_number_of_unresolved_identifiers": 0,
      "total_number_of_batches": 1,
      "current_batch": 1,
      "data_request_id": "0-e4891be4-af17-4c43-980e-c524fc4a8350-2019-12-03T14:22:08+0000",
      "data_request_id_expiration_time": "2019-12-03T14:22:08+0000"
    },
    "data": [
      {
        "requested_id": "IID000000002745031",
        "issuer_metadata": [
          {
            "ISSUERID": "IID000000002745031",
            "ISSUER_NAME": "ALPHABET INC.",
            "CIK_NUM": "0001652044",
            "ISSUER_ISIN": "US02079K1079",
            "ISSUER_TICKER": "GOOGL",
            "as_of_date": "2019-09-30",
            "valid_until_date": "2019-10-01"
          }
        ],
        "factors": [
          {
            "name": "ESG_RATING",
            "data_values": [
              {
                "value": "AA",
                "as_of_date": "2019-09-30",
                "as_at_date": "2019-12-02"
              },
              {
                "value": "AA",
                "as_of_date": "2019-10-31",
                "as_at_date": "2019-12-02"
              }
            ]
          },
          {
            "name": "ISSUER_NAME",
            "data_values": [
              {
                "value": "ALPHABET INC.",

```

```

        "as_of_date": "2019-09-30",
        "as_at_date": "2019-12-02"
    },
    {
        "value": "ALPHABET INC.",
        "as_of_date": "2019-10-31",
        "as_at_date": "2019-12-02"
    }
]
},
{
    "name": "ISSUER_ISIN",
    "data_values": [
        {
            "value": "US02079K1079",
            "as_of_date": "2019-09-30",
            "as_at_date": "2019-12-02"
        },
        {
            "value": "US02079K1079",
            "as_of_date": "2019-10-31",
            "as_at_date": "2019-12-02"
        }
    ]
},
{
    "name": "ISSUER_SEDOL",
    "data_values": [
        {
            "value": "BYY88Y7",
            "as_of_date": "2019-09-30",
            "as_at_date": "2019-12-02"
        },
        {
            "value": "BYY88Y7",
            "as_of_date": "2019-10-31",
            "as_at_date": "2019-12-02"
        }
    ]
},
{
    "name": "ISSUERID",
    "data_values": [
        {
            "value": "IID0000000002745031",
            "as_of_date": "2019-09-01"
        }
    ]
}
}
}
}
}

```

### HTTP Method:

POST

### REQUEST

### Service URLs:

<https://api.msci.com/esg/data/v1.0/issuers/history>

### Body payload

Name	Type	Description
	IssuerHistoryRequest	
issuer_identifier_list	array	A list of one or more issuer/instrument identifiers which resolve to issuers. Identifiers can be MSCI Issuer IDs, ISINs, CUSIPs, MDS UIDS, etc
[array item]	string	
category_path_list	array	A list of factor category paths as defined in the ESG Factor Metadata. The factor category path determines a set of data factors to retrieve. This works the same as the current day endpoint. Category paths, product names, and factor names can be mixed together, but at least one factor name, category path, or product name must be specified for a request to be valid.
[array item]	string	
product_name_list	array	A list of factor product names as defined in the ESG Factor Metadata. The factor product name determines a set of data factors to retrieve. This has the same functionality as the current day endpoint. Product names, category paths, and factor names can be mixed together, but at least one factor name, category path, or product name must be specified for a request to be valid.

Name	Type	Description
[array item]	string	
factor_name_list	array	A list of ESG Factor names as defined in the ESG Factor Metadata. Factor names, product names, and category paths can be mixed together, but at least one factor name, category path, or product name must be specified for a request to be valid.
[array item]	string	
start_date	date	<p>The first date to be used for data retrieval. If only a start_date is given, only data for the specified date will be returned.</p> <p>The format of the date is yyyy-mm-dd. For example, 2020-04-01 would be April 1, 2020.</p>
end_date	date	<p>The end date for the range of values to be returned. If not specified, the request will return a single value corresponding to the given start_date. The end_date cannot exceed the as_at_date. If the end_date is after the as_at_date, the request will be rejected with a 400 status code.</p> <p>The format of the date is yyyy-mm-dd. For example, 2020-04-01 would be April 1, 2020.</p>
as_at_date	date	<p>A date which defines which corrections should be returned. If the as_at_date is before the end_date, the as_at_date will override the end_date. No values will be returned beyond the specified as_at_date. If no as_at_date is specified, the data will be viewed from the perspective of the date that the request was made.</p> <p>The 'as at' date functions like a time machine. It allows the client to go back in time to view data from a particular point in time in the past. The values that are returned will be the values</p>



Name	Type	Description						
		<p>that would have been seen if a request had been made on the specified 'as at' date.</p> <p>The format of the date is yyyy-mm-dd. For example, 2020-04-01 would be April 1, 2020.</p> <p>The API treats historical data as a continuous stream of values for the date range specified in the call. The user can choose how often they would like to sample the stream of data. Perhaps the client only cares about what the value is at the end of each month, for example. The following options are available for the Data Sample Frequency parameter:</p> <table><tr><th>Data Sample Name</th><th>Description</th></tr><tr><td>daily</td><td>A data value sample will be taken from each date in the specified range. If there are 200 days in the given range, there will be 200 samples taken from the stream of values, one for each day in the range. The daily range is currently only available when using the matrix_by_factor layout.</td></tr><tr><td>business_month_end</td><td>A data value sample will be taken from each business month end date in the specified range. If there are 12 months in the given range, there will be 12 samples taken from the stream of values, one for each business month end day in the range</td></tr></table> <p>If a data sample frequency is not specified, the value defaults to business_month_end. When specifying a date range, keep in mind that the range must include at least one business month end date if this option is in effect.</p>	Data Sample Name	Description	daily	A data value sample will be taken from each date in the specified range. If there are 200 days in the given range, there will be 200 samples taken from the stream of values, one for each day in the range. The daily range is currently only available when using the matrix_by_factor layout.	business_month_end	A data value sample will be taken from each business month end date in the specified range. If there are 12 months in the given range, there will be 12 samples taken from the stream of values, one for each business month end day in the range
Data Sample Name	Description							
daily	A data value sample will be taken from each date in the specified range. If there are 200 days in the given range, there will be 200 samples taken from the stream of values, one for each day in the range. The daily range is currently only available when using the matrix_by_factor layout.							
business_month_end	A data value sample will be taken from each business month end date in the specified range. If there are 12 months in the given range, there will be 12 samples taken from the stream of values, one for each business month end day in the range							
data_sample_frequency	string							
data_layout	string	<p>The API offers different data layouts to suit the different ways that a client may want to process the data that they receive. The Data Layout options provide a way for the client to tailor the output to their needs</p>						

Name	Type	Description								
		<table><tr><th>Data Layout Name</th><th>Description</th></tr><tr><td>by_factor</td><td>The data results will be grouped by factor, and within each factor the values will be display in reverse chronological order</td></tr><tr><td>matrix_by_factor</td><td>This layout is more compressed than the standard by_factor layout and is designed to support usage by quants who will want data rows with no gaps. The exact layout of the data content is still being finalized, but it will represent the data as a 2-d matrix. This layout is compatible with both daily and business_month_end sample frequencies.</td></tr><tr><td>change_ranges</td><td>This layout will only show change ranges for each value returned. Ranges will start at the first date in the requested range and end on the last date. If a value for a factor was value for 3 months in the range, and then changed and was valid for the remaining months, there would be two value ranges in the result for that particular value.</td></tr></table> <p>If this value is not specified, the <b>by_factor</b> layout will be used.</p>	Data Layout Name	Description	by_factor	The data results will be grouped by factor, and within each factor the values will be display in reverse chronological order	matrix_by_factor	This layout is more compressed than the standard by_factor layout and is designed to support usage by quants who will want data rows with no gaps. The exact layout of the data content is still being finalized, but it will represent the data as a 2-d matrix. This layout is compatible with both daily and business_month_end sample frequencies.	change_ranges	This layout will only show change ranges for each value returned. Ranges will start at the first date in the requested range and end on the last date. If a value for a factor was value for 3 months in the range, and then changed and was valid for the remaining months, there would be two value ranges in the result for that particular value.
Data Layout Name	Description									
by_factor	The data results will be grouped by factor, and within each factor the values will be display in reverse chronological order									
matrix_by_factor	This layout is more compressed than the standard by_factor layout and is designed to support usage by quants who will want data rows with no gaps. The exact layout of the data content is still being finalized, but it will represent the data as a 2-d matrix. This layout is compatible with both daily and business_month_end sample frequencies.									
change_ranges	This layout will only show change ranges for each value returned. Ranges will start at the first date in the requested range and end on the last date. If a value for a factor was value for 3 months in the range, and then changed and was valid for the remaining months, there would be two value ranges in the result for that particular value.									
inherit_missing_values	boolean	<p>A Boolean value used to indicate whether the API should inherit missing values from a parent issuer. This option is not available to clients who do not have the inheritance feature associated with their account.</p> <p>This option will automatically be set to true if the caller is permitted to receive inherited data.</p>								

## RESPONSE

### Possible Outputs

Status	Description
200	OK
206	Partial content may have been returned
400	Bad Request
401	Unauthorized

Status	Description
403	Forbidden
404	Not found
500	Internal Server Error

### Sample Output

**by\_factor layout:**

#### Input

```
{
  "issuer_identifier_list": [
    "IID000000002745031"
  ],
  "factor_name_list": [
    "ESG_RATING",
    "ISSUER_NAME",
    "ISSUER_ISIN",
    "ISSUER_SEDOL",
    "ISSUERID"
  ],
  "start_date": "2019-09-01",
  "end_date": "2019-12-01",
  "data_layout": "by_factor",
  "data_sample_frequency": "business_month_end",
  "inherit_missing_values": true
}
```

#### Output

```
{
  "status": "OK",
  "code": 200,
  "trace_id": "158760f24d9cd939",
  "timestamp": "2019-12-02T14:22:41Z",
  "messages": [],
  "result": {
    "response_metadata": {
      "total_number_of_instruments": 1,
      "total_number_of_unresolved_identifiers": 0,
      "total_number_of_batches": 1,
      "current_batch": 1,

```

```

      "data_request_id": "0-e4891be4-af17-4c43-980e-c524fc4a
8350-2019-12-03T14:22:08+0000",
      "data_request_id_expiration_time": "2019-12-03T14:22:0
8+0000"
    },
    "data": [
      {
        "requested_id": "IID000000002745031",
        "issuer_metadata": [
          {
            "ISSUERID": "IID000000002745031",
            "ISSUER_NAME": "ALPHABET INC.",
            "CIK_NUM": "0001652044",
            "ISSUER_ISIN": "US02079K1079",
            "ISSUER_TICKER": "GOOGL",
            "as_of_date": "2019-09-30",
            "valid_until_date": "2019-10-01"
          }
        ]
      },
      {
        "name": "ESG_RATING",
        "data_values": [
          {
            "value": "AA",
            "as_of_date": "2019-09-30",
            "as_at_date": "2019-12-02"
          },
          {
            "value": "AA",
            "as_of_date": "2019-10-31",
            "as_at_date": "2019-12-02"
          }
        ]
      },
      {
        "name": "ISSUER_NAME",
        "data_values": [
          {
            "value": "ALPHABET INC.",
            "as_of_date": "2019-09-30",
            "as_at_date": "2019-12-02"
          },
          {
            "value": "ALPHABET INC.",
            "as_of_date": "2019-10-31",
            "as_at_date": "2019-12-02"
          }
        ]
      },
      {
        "name": "ISSUER_ISIN",
        "data_values": [
          {
            "value": "US02079K1079",
            "as_of_date": "2019-09-30",

```

```

        "as_at_date": "2019-12-02"
      },
      {
        "value": "US02079K1079",
        "as_of_date": "2019-10-31",
        "as_at_date": "2019-12-02"
      }
    ]
  },
  {
    "name": "ISSUER_SEDOL",
    "data_values": [
      {
        "value": "BYY88Y7",
        "as_of_date": "2019-09-30",
        "as_at_date": "2019-12-02"
      },
      {
        "value": "BYY88Y7",
        "as_of_date": "2019-10-31",
        "as_at_date": "2019-12-02"
      }
    ]
  },
  {
    "name": "ISSUERID",
    "data_values": [
      {
        "value": "IID000000002745031",
        "as_of_date": "2019-09-01"
      }
    ]
  }
]
}

```

### change\_ranges layout:

#### Input

```

{
  "issuer_identifier_list": [
    "IID000000002745031"
  ],
  "factor_name_list": [
    "ESG_RATING",
    "ISSUER_NAME",
    "ISSUER_ISIN",
    "ISSUER_SEDOL",
    "ISSUERID"
  ]
}

```

```

    ],
    "start_date": "2019-10-01",
    "end_date": "2019-12-01",
    "data_layout": "change_ranges",
    "inherit_missing_values": true
}

```

## Output

```

{
  "status": "OK",
  "code": 200,
  "trace_id": "e8d5a08ec990f91d",
  "timestamp": "2019-12-02T14:33:42Z",
  "messages": [],
  "result": {
    "response_metadata": {
      "total_number_of_instruments": 1,
      "total_number_of_unresolved_identifiers": 0,
      "total_number_of_batches": 1,
      "current_batch": 1,
      "data_request_id": "1-938891fb-4e5a-4f37-9943-8908380d
328b-2019-12-03T14:33:42+0000",
      "data_request_id_expiration_time": "2019-12-03T14:33:4
2+0000"
    },
    "data": [
      {
        "requested_id": "IID000000002745031",
        "issuer_metadata": [
          {
            "ISSUERID": "IID000000002745031",
            "ISSUER_NAME": "ALPHABET INC.",
            "CIK_NUM": "0001652044",
            "ISSUER_ISIN": "US02079K1079",
            "ISSUER_TICKER": "GOOGL",
            "as_of_date": "2019-10-01",
            "valid_until_date": "2019-12-01"
          }
        ],
        "factors": [
          {
            "name": "ESG_RATING",
            "data_values": [
              {
                "value": "AA",
                "as_of_date": "2019-10-01",
                "valid_until_date": "2019-12-01",
                "as_at_date": "2019-12-02"
              }
            ]
          }
        ]
      }
    ],
    {

```

```

    "name": "ISSUER_NAME",
    "data_values": [
      {
        "value": "ALPHABET INC.",
        "as_of_date": "2019-10-01",
        "valid_until_date": "2019-12-01",
        "as_at_date": "2019-12-02"
      }
    ]
  },
  {
    "name": "ISSUER_ISIN",
    "data_values": [
      {
        "value": "US02079K1079",
        "as_of_date": "2019-10-01",
        "valid_until_date": "2019-12-01",
        "as_at_date": "2019-12-02"
      }
    ]
  },
  {
    "name": "ISSUER_SEDOL",
    "data_values": [
      {
        "value": "BYY88Y7",
        "as_of_date": "2019-10-01",
        "valid_until_date": "2019-12-01",
        "as_at_date": "2019-12-02"
      }
    ]
  },
  {
    "name": "ISSUERID",
    "data_values": [
      {
        "value": "IID0000000002745031",
        "as_of_date": "2019-10-01",
        "valid_until_date": "2019-12-01"
      }
    ]
  }
]
}

```

**matrix\_by\_factor layout**

**Input**

```
{
```

```

"issuer_identifier_list": [
  "IID000000002745031"
],
"factor_name_list": [
  "ESG_RATING",
  "ISSUER_NAME",
  "ISSUER_ISIN",
  "ISSUER_SEDOL",
  "ISSUERID"
],

"start_date": "2019-10-01",
"end_date": "2019-11-01",
"data_layout": "matrix_by_factor",
"data_sample_frequency": "daily",
"inherit_missing_values": true
}

```

### Output

```

{
  "status": "OK",
  "code": 200,
  "trace_id": "f9bf384fed5e772c",
  "timestamp": "2019-12-02T14:28:22Z",
  "messages": [],
  "result": {
    "response_metadata": {
      "total_number_of_instruments": 1,
      "total_number_of_unresolved_identifiers": 0,
      "total_number_of_batches": 2,
      "current_batch": 1,
      "data_request_id": "2-5f7c93a3-debd-48ce-a780-01c7f0f4c294-2019-12-03T14:28:18+0000",
      "data_request_id_expiration_time": "2019-12-03T14:28:18+0000"
    },
    "data": {
      "requested_ids": [
        "IID000000002745031"
      ],
      "as_at_date": "2019-12-02",
      "as_of_dates": [
        "2019-10-01",
        "2019-10-02",
        "2019-10-03",
        "2019-10-04",
        "2019-10-05",
        "2019-10-06",
        "2019-10-07",
        "2019-10-08",
        "2019-10-09",
        "2019-10-10",
        "2019-10-11",

```



[illegible]

```

        "AA"
      ]
    ],
  },
  {
    "factor": "ISSUER_NAME",
    "values": [
      [
        "ALPHABET INC.",
        "ALPHABET INC.",
        "ALPHABET INC.",
        "ALPHABET INC.",
        "ALPHABET INC.",
        "ALPHABET INC.",
        "ALPHABET INC.",
        "ALPHABET INC.",
        "ALPHABET INC.",
        "ALPHABET INC.",
        "ALPHABET INC.",
        "ALPHABET INC.",
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        "ALPHABET INC.",
        "ALPHABET INC.",
        "ALPHABET INC.",
        "ALPHABET INC.",
        "ALPHABET INC.",
        "ALPHABET INC.",
        "ALPHABET INC.",
        "ALPHABET INC."
      ]
    ]
  },
  {
    "factor": "ISSUER_ISIN",
    "values": [
      [
        "US02079K1079",
        "US02079K1079",
        "US02079K1079",
        "US02079K1079",
        "US02079K1079",
        "US02079K1079",
        "US02079K1079",
        "US02079K1079",
        "US02079K1079",
        "US02079K1079",
        "US02079K1079"
      ]
    ]
  }
]

```

[illegible]

## /METADATA/FACTORS

## Retrieve data factor metadata information

## ENDPOINT DESCRIPTION

This endpoint is used to retrieve information about the factor data that is available to the client. A request can filter results based on category paths, product names, and factor type (issuer or fund factors). This information can be used to formulate calls to the issuers end point which accepts category paths, product names, and factor IDs as query parameters.

## REQUEST

### Service URLs:

<https://api.msci.com/esg/data/v1.0/metadata/factors>

### HTTP Method:

GET

### Query parameters

Name	Type	Mandatory	Default value	Accepted values	Description
category_path_list	array				ESG Data Factors are organized into a hierarchy of categories. Category Paths are used to locate a group of factors that belong to the specified path(s).
[array item]	string				A category path represents a series of category names which are used to reach a set of ESG Data Factors located in the specified portion of the category tree. A category path consists of one or more category names, separated by a colon.
product_name_list	array				ESG Data Factors are grouped into various product classifications. A user can specify a list of product names to limit the factors that are returned for this query.
[array item]	string				A product name is a string identifying a particular ESG Data Factor product. A full list of product names is available via the /parameterValues/factorProductNames endpoint.
factor_type	string		all	fund,issuer,all	Factor Type is an optional value which will restrict the return factors to the specified type. If this option is not specified, all factor types will be returned. Available options are issuer, fund, and all. Note the options that are available are based on user permissions. Some users may only be allowed to use fund or all, other users may only be able to use issuers or all.
factor_name_list	array				A caller can specify one or more factor names for which they want to retrieve factor metadata. Data will be returned for all valid factor names, along with a list of any factor names which weren't recognized. If a name isn't recognized, it could be the factor doesn't exist, or the caller doesn't have access to that factor.
[array item]	string				A factor name is a simple string value. Access to factors is permissioned and metadata is only available for factors for which the user has access.

### RESPONSE

#### Possible Outputs

Status	Description
200	Success
401	Unauthorized
403	No subscription available for this data
500	Unexpected Server Error
503	Service Unavailable

### Output Encoding

application/json

### Output Description

The factors endpoint is used to return metadata related to the data factors that can be returned in a data request made via the issuers endpoint. The metadata includes the name of the factor, the data type, a minimum/maximum value if appropriate, as well as other basic factor information.

### Response Body Returned

Possible outputs for status: 20

### Sample Output

```
{
  "status": "OK",
  "code": 200,
  "trace_id": "da8691d185a3f4f9",
  "timestamp": "2021-05-17T12:17:18Z",
  "messages": [],
  "result": {
    "factors": [
      {
        "factor_name": "15PCT_RENEW_CAP",
        "description": "Companies with at least 15% of their
installed capacity attributed to renewable sources.",
        "data_type": "Boolean",
        "factor_type": "issuer",
        "display_name": "15% Renewable Installed Capacity",
        "inheritance_allowed": true,
        "category_paths": [
          "Other:ESG Internal:Company Data"
        ],
        "product_names": [
          "Other"
        ]
      },
      {
        "factor_name": "1DEG_RED_REQ",
        "description": "The greenhouse gas direct emissions (scope
1) reduction requirements of the company, expressed in megatonnes
per year in 2033, assuming a global 1.5°C target. Please refer to
the Climate VaR methodology document for further details on scenario
options."
      }
    ]
  }
}
```

```

        "data_type": "Double",
        "factor_type": "issuer",
        "display_name": "1.5°C Scope 1 GHG Emissions Reduction
Requirements [Mt/y]",
        "inheritance_allowed": true,
        "category_paths": [
            "Carbon and Fossil Fuel:Scenario Analysis:Climate Value at
Risk:Transition risks and opportunities:1.5 degree Celsius
scenario:Company summary"
        ],
        "product_names": [
            "Climate VaR",
            "Internal Only - Screening"
        ]
    }
}
}
}
}

```

## CODE SAMPLES

### cURL

```

curl -i -H "Accept: application/json" -X GET
https://api.msci.com/esg/data/v1.0/metadata/factors?category_path_list=
ESG+Ratings:Company+Summary&product_name_list=ESG+Ratings

```

### Python

```

import requests url =
"https://api.msci.com/esg/data/v1.0/metadata/factors?category_path_list=
ESG+Ratings:Company+Summary&product_name_list=ESG+Ratings"; headers
= { "Accept": "application/json" } response = requests.request("POST",
url, headers=headers) print(response.text)

```

### Java

```

HttpResponse response =
Unirest.get("https://api.msci.com/esg/data/v1.0/metadata/factors?category_path_list=
ESG+Ratings:Company+Summary&product_name_list=ESG+Ratings")
.header("Accept", "application/json").asString();

```

### C#

```

var client = new
RestClient("https://api.msci.com/esg/data/v1.0/metadata/factors?category_path_list=
ESG+Ratings:Company+Summary&product_name_list=ESG+Ratings"); var request = new
RestRequest(Method.GET); request.AddHeader("Accept", "application/json"); IRestResponse
response = client.Execute(request);

```

## /PARAMETERVALUES/COUNTRIES

Return a list of available countries

### ENDPOINT DESCRIPTION

This endpoint is used to retrieve a list of country code and corresponding country names that are available to the caller based on their permissions. The country codes can be used in queries for issuer data.

### REQUEST

### Service URLs:

<https://api.msci.com/esg/data/v1.0/parameterValues/countries>

### HTTP Method:

GET

### RESPONSE

#### Possible Outputs

Status	Description
200	Success
401	Unauthorized
403	No subscription available for this data
500	Unexpected Server Error
503	Service Unavailable

### Output Encoding

application/json

### Sample Output

```
{
  "status": "OK",
  "code": 200,
  "trace_id": "194e01373b44a069",
  "timestamp": "2018-11-26T14:07:18Z",
  "messages": [],
  "result": {
    "countries": [
      {
        "country_name": "Poland",
        "country_code": "PL"
      },
      {
        "country_name": "British Solomon Islands",
        "country_code": "SB"
      },
      {
        "country_name": "Serbia and Montenegro",
        "country_code": "CS"
      },
      {
        "country_name": "Chad",
        "country_code": "TD"
      },
      {
        "country_name": "Angola",
        "country_code": "AO"
      },
      {
        "country_name": "Luxembourg",

```

```

        "country_code": "LU"
    },
    {
        "country_name": "Malawi",
        "country_code": "MW"
    },
    {
        "country_name": "HEARD AND MC DONALD ISLANDS",
        "country_code": "HM"
    },
    {
        "country_name": "British Indian Ocean Territory",
        "country_code": "IO"
    },
    {
        "country_name": "Finland",
        "country_code": "FI"
    },
    {
        "country_name": "Germany",
        "country_code": "DE"
    },
    {
        "country_name": "Egypt",
        "country_code": "EG"
    },
    {
        "country_name": "Bosnia and Herzegovina",
        "country_code": "BA"
    },
    {
        "country_name": "Cocos (Keeling) Islands",
        "country_code": "CC"
    },
    {
        "country_name": "SS",
        "country_code": "SS"
    },
    {
        "country_name": "Nicaragua",
        "country_code": "NI"
    },
    {
        "country_name": "Madagascar",
        "country_code": "MG"
    },
    {
        "country_name": "Virgin Islands, U.S.",
        "country_code": "VI"
    },
    {
        "country_name": "Uganda",
        "country_code": "UG"
    },
    {
        "country_name": "Brazil",
        "country_code": "BR"
    },
    {
        "country_name": "Seychelles",
        "country_code": "SC"
    },
    {
        "country_name": "Mexico",
        "country_code": "MX"
    },
    },

```



```
{
  "country_name": "New Zealand",
  "country_code": "NZ"
}
```

## CODE SAMPLES

### cURL

```
curl -i -H "Accept: application/json" -X GET
https://api.msci.com/esg/data/v1.0/parameterValues/countries
```

### Python

```
import requests url =
"https://api.msci.com/esg/data/v1.0/parameterValues/countries";
headers = { "Accept": "application/json" } response =
requests.request("POST", url, headers=headers) print(response.text)
```

### Java

```
HttpResponse response =
Unirest.get("https://api.msci.com/esg/data/v1.0/parameterValues/countries")
.header("Accept", "application/json") .asString();
```

### C#

```
var client = new
RestClient("https://api.msci.com/esg/data/v1.0/parameterValues/countries");
var request = new RestRequest(Method.GET);
request.AddHeader("Accept", "application/json"); IRestResponse
response = client.Execute(request);
```

## /PARAMETERVALUES/COVERAGES

Return a list of available issuer coverage universes

### ENDPOINT DESCRIPTION

ESG Data is collected for a large number of issuers. In most cases, clients will want to limit the number of issuers they get in a response to only those who have data for a particular coverage universe. For example, a client may wish to only get issues that have ESG Ratings data. The coverage universe is a way to limit the response to issuers that meet particular data characteristics. This endpoint will return a list of data coverage names that are available to the caller.

### REQUEST

#### Service URLs:

<https://api.msci.com/esg/data/v1.0/parameterValues/coverages>

#### HTTP Method:

GET

#### Available coverages:

```
"agr",
"bissr",
"esg_ratings",
"esg_controversies",
"governance_metrics",
"government_ratings",
"iva",
"climate_var",
"climate_change_metrics"
```

### /PARAMETERVALUES/ESGINDUSTRIES

Return a list of available ESG Industries

#### ENDPOINT DESCRIPTION

This endpoint provides a list of ESG Industry codes and names. The industry codes can be used in other endpoints that take an ESG industry id as a parameter.

#### REQUEST

##### *Service URLs:*

<https://api.msci.com/esg/data/v1.0/parameterValues/esgIndustries>

##### *HTTP Method:*

GET

### /PARAMETERVALUES/FACTORCATEGORYPATHS

Retrieve a list of category paths used to organize factors

#### ENDPOINT DESCRIPTION

This endpoint is used to return a list of Category Paths which identify the functional areas for all factors available to the caller. Factors are organized by categories in a tree-like structure. Category Paths represent one way which a client can indicate which factors they would like to retrieve when getting data for a set of issuers. This call will return a JSON object containing a list of all Category Paths to which a client is permitted. The request can contain optional parameters to limit the paths to those which start with a set of characters, or which contain a set of characters (or both).

#### REQUEST

##### *Service URLs:*

<https://api.msci.com/esg/data/v1.0/parameterValues/factorCategoryPaths>

##### *HTTP Method:*

GET

### Query parameters

Name	Type	Mandatory	Default value	Accepted values	Description
contains	string				A string which will be used to match a string of characters anywhere inside of a Category Path. For example, a client might wish to see all categories that are related to 'Carbon'. If 'Carbon' is specified, all category paths containing the string 'Carbon' will be returned. Matches will be case-insensitive.
starts_with	string				A string which will be used to match the starting characters of a Category Path. For example, a client might wish to see all categories that are related to 'ESG Ratings'. If 'ESG Ratings' is specified, all category paths starting with 'ESG Ratings' will be returned. Matches will be case-insensitive.

## /PARAMETERVALUES/FACTORPRODUCTNAMES

Retrieve a list of product names used to identify groupings of factors

### ENDPOINT DESCRIPTION

ESG Data Factors are grouped into product categories. This request is used to provide a list of products to which the client has been granted access. The product names can be used in other queries to retrieve a list of factors relating to the specified product(s).

### REQUEST

#### Service URLs:

<https://api.msci.com/esg/data/v1.0/parameterValues/factorProductNames>

#### HTTP Method:

GET

### Query parameters

Name	Type	Mandatory	Default value	Accepted values	Description
contains	string				The contains parameter is used to limit the response to those product names that contain the given string. This parameter can be combined with the starts_with parameter.
starts_with	string				The starts_with parameter is used to limit the response to those product names that start with the given string. This parameter can be combined with the contains parameter.

### /PARAMETERVALUES/FUNDASSETCLASSES

#### ENDPOINT DESCRIPTION

This endpoint is used to retrieve a list of fund asset class names. The names can be used in the fund\_asset\_class\_list parameter of the funds endpoint to restrict results to funds that belong to the specified fund asset class names.

#### REQUEST

##### *Service URLs:*

<https://api.msci.com/esg/data/v1.0/parameterValues/fundAssetClasses>

##### *HTTP Method:*

GET

### /PARAMETERVALUES/FUNDASSETUNIVERSES

#### ENDPOINT DESCRIPTION

This endpoint is used to retrieve a list of fund asset universe names. The names can be used in the fund\_asset\_universe\_list parameter of the funds endpoint to restrict results to funds that belong to the specified fund asset universe names.

#### REQUEST

##### *Service URLs:*

<https://api.msci.com/esg/data/v1.0/parameterValues/fundAssetUniverses>

##### *HTTP Method:*

GET

## /PARAMETERVALUES/FUNDDOMICILES

### ENDPOINT DESCRIPTION

This endpoint is used to retrieve a list of fund domicile names. The names can be used in the fund\_domicile\_list parameter of the funds endpoint to restrict results to funds that belong to the specified fund domicile names.

### REQUEST

#### *Service URLs:*

<https://api.msci.com/esg/data/v1.0/parameterValues/fundDomiciles>

#### *HTTP Method:*

GET

## /PARAMETERVALUES/FUNDLIPPERGLOBALCLASSES

### ENDPOINT DESCRIPTION

This endpoint is used to retrieve a list of Lipper global class names. The names can be used in the fund\_lipper\_global\_class\_list parameter of the funds endpoint to restrict results to funds that belong to the specified Lipper global class names.

### REQUEST

#### *Service URLs:*

<https://api.msci.com/esg/data/v1.0/parameterValues/fundLipperGlobalClasses>

#### *HTTP Method:*

GET

## /PARAMETERVALUES/GICSSUBINDUSTRIES

Retrieve a list of available GICS Sub-Industries

### ENDPOINT DESCRIPTION

This endpoint is used to retrieve a list of GICS SubIndustry names and codes. The codes can be used in other endpoints that allow for the specification of GICS SubIndustry ids.

### REQUEST

#### *Service URLs:*

<https://api.msci.com/esg/data/v1.0/parameterValues/gicsSubIndustries>

#### *HTTP Method:*

GET

## /PARAMETERVALUES/INDEXES

Retrieve a list of available indexes

### ENDPOINT DESCRIPTION

This endpoint returns a list of indexes to which the accessing account has been permitted. The returned value includes both the index name and the index code. The index code can be used in other requests that can use index IDs as input to the request.

### REQUEST

#### **Service URLs:**

<https://api.msci.com/esg/data/v1.0/parameterValues/indexes>

#### **HTTP Method:**

GET



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